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| APPLICATION NO. FILING DATE |              | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |  |
|-----------------------------|--------------|-------------------------|---------------------|------------------|--|--|
| 10/665,177                  | 09/18/2003   | Seiji Doi               | 0941.68350          | 6323             |  |  |
| 75                          | 90 03/30/200 |                         | EXAM                | EXAMINER         |  |  |
| Patrick G. Bur              | ns           | SEFER, AHMED N          |                     |                  |  |  |
| Suite 2500<br>300 South Wac | ker Drive    | ART UNIT                | PAPER NUMBER        |                  |  |  |
| Chicago, IL 6               |              | 2826                    |                     |                  |  |  |
|                             |              | DATE MAILED: 03/30/2004 |                     |                  |  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |  | Application  | Application No. Applicant(s) |  |           |         |  |  |  |
|--|--|--------------|------------------------------|--|-----------|---------|--|--|--|
| Office Action Summary  |  |              | 10/665,17                    | 7  | DOI ET AL |         |  |  |  |
|  |  |              | Examiner                     |  | Art Unit  |         |  |  |  |
|  |  |              | A. Sefer                     |  | 2826      |         |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |  |              |                              |  |           |         |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  |  |              |                              |  |           |         |  |  |  |
| Status   | Pagagorius to communication(s) file  | nd on        |                              |  |           |         |  |  |  |
| _  | Responsive to communication(s) filed on  |              |                              |  |           |         |  |  |  |
| , <del></del>  |  |              |                              |  |           |         |  |  |  |
| ٧,۵  | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.                        |              |                              |  |           |         |  |  |  |
| Dispositi  | on of Claims   |              |                              |  |           |         |  |  |  |
| ,  | Claim(s) 39-43 is/are pending in the application.  |              |                              |  |           |         |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.   |              |                              |  |           |         |  |  |  |
| ·  | 5) Claim(s) is/are allowed.  |              |                              |  |           |         |  |  |  |
|  | 6)⊠ Claim(s) <u>39-43</u> is/are rejected.   |              |                              |  |           |         |  |  |  |
|  | Claim(s) is/are objected to.   |              |                              |  |           |         |  |  |  |
|  | Claim(s) are subject to restrict   | ction and/or | r election re                | equirement.  |           |         |  |  |  |
| Applicati  | on Papers  |              |                              |  |           |         |  |  |  |
| 9) The specification is objected to by the Examiner.   |  |              |                              |  |           |         |  |  |  |
| 10)[_]   | 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.                                       |              |                              |  |           |         |  |  |  |
|  | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).                  |              |                              |  |           |         |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |  |              |                              |  |           |         |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |              |                              |  |           |         |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120  |  |              |                              |  |           |         |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No. 09/903,010.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> <li>13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.</li> <li>37 CFR 1.78.</li> <li>a) The translation of the foreign language provisional application has been received.</li> <li>14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.</li> </ul> |  |              |                              |  |           |         |  |  |  |
| Attachment(s)  |  |              |                              |  |           |         |  |  |  |
| 2) Notic   | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (Fination Disclosure Statement(s) (PTO-1449) P |              | ··                           | 4) Interview Summary 5) Notice of Informal F 6) Other: | • •       | • • ——— |  |  |  |

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
- 2. Claim 39 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "in which multiple <u>blanches</u> are repeated" is not disclosed in the specification to enable one skilled in the art to make and/or use the invention. Without this information it would take undue experimentation to make and use the claimed invention.

Claim 39 recites the limitation "said assign" in part (e). There is insufficient antecedent basis for this limitation in the claim.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 39-43, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. ("Takeda") US PG-Pub 2003/0202146 in view of Yamanaka et al. ("Yamanaka") USPN 6,452,653.

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Takeda discloses in figs. 27-35 a method for fabricating a liquid crystal display device including a liquid crystal layer 229 clamped between a first substrate and a second substrate, said method comprising the steps of: (a) forming a pixel electrode pattern on said first substrate; (b) painting a resist film on said pixel electrode pattern; (c) exposing and developing said resist film and forming a resist pattern having a shape, in which multiple blanches 217 are repeated, on said pixel electrode pattern; so that liquid crystal molecules in said liquid crystal layer orient approximately in vertical to a surface of said liquid crystal layer in a non-driving state in which a driving electric field is not applied to said liquid crystal layer, and said liquid crystal molecules orient approximately in parallel to said surface of said liquid crystal layer in a driving state in which the driving electric field is applied to said liquid crystal layer, but does not disclose conducting an ashing process for said resist pattern; and conducting a thermosetting process for said ashing pattern that said assign process conducted.

Yamanaka discloses (see figs. 8-12 and col. 10, lines 18-55) a method for fabricating a liquid crystal display device including a liquid crystal layer 21 clamped between a first substrate and a second substrate including conducting an ashing process for a resist pattern; and conducting a thermosetting process for said ashing pattern that <u>said assign process</u> conducted.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate Yamanaka's teachings with Takeda's since that would enhance brightness while reducing the occurrence of uneven display as taught by Yamanaka.

As for claim 41 and 42, he specification contains no disclosure of either the critical nature of the claimed arrangement or any unexpected results arising therefrom. Where patentability is

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said to be based upon particular chosen dimensions or upon another variable recited in a claim, the applicant must show that the chosen dimensions are critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

As for claim 43, Yamanaka discloses (see col. 31, lines 40-65) a thermosetting process at a temperature within the range cited in the claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (571) 272-1921.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2800/

ANS March 22, 2004 SUPERVISORY PATENT EXAMINER
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